I (we) claim:

1. A liquid discriminating apparatus comprising:

a concentration detecting device that detects concentration of a liquid reducing agent based on heat transfer characteristics between two positions spaced apart from each other, in a storage tank that stores a liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an engine exhaust system; and a control unit which discriminates a type of the liquid in said storage tank, wherein

said control unit discriminates that the liquid in said storage tank is water, or that the liquid in said storage tank is a liquid reducing agent, or that said storage tank is empty, when the concentration detected by said concentration detecting device is equal to or less than 0%, or more than 0% and also equal to or less than the predetermined concentration, or more than the predetermined concentration, respectively.

2. The apparatus according to claim 1, wherein said control unit counts up the frequency at which the concentration detected by said concentration detecting device becomes equal to or less than 0%, and when the counted frequency reaches the predetermined frequency or more, discriminates that the liquid in said storage tank is the water.

3. The apparatus according to claim 1 or claim 2, wherein a

display device that displays visibly the discrimination result by said control unit is disposed.

4. A liquid discriminating method wherein in a storage tank that stores the liquid supplied to a nitrogen oxide reduction catalytic converter disposed in an engine exhaust system, the concentration of a liquid reducing agent is detected based on heat transfer characteristics between two positions spaced apart from each other; and it is discriminated that the liquid in said storage tank is water, or that the liquid in said storage tank is the liquid reducing agent, that said storage tank is empty, when the detected concentration is equal to or less than 0%, more than 0% and also equal to or less than the predetermined concentration, or more than the predetermined concentration, respectively.